Expressed Human UGT1.4 Protein Catalyzes the Formation of Quaternary Ammonium-linked Glucuronides. MITCHELL D. GREEN, WARREN P. BISHOP, and THOMAS R. TEPHY 299

ARTICLES

Sulfation and Glucuronidation of Acetaminophen by Human Hepatocytes Cultured on Matrigel and Type 1 Collagen Reproduces Conjugation in Vivo. ROBERT E. KANE, ALBERT P. LI, and DONALD R. KAMINSKI 303

Comparative Metabolism of 3’-Azido-3’-deoxythymidine in Cultured Hepatocytes from Rats, Dogs, Monkeys, and Humans. FLORENCE NICOLAS, GEORGES DE SOUSA, PASCAL THOMAS, MICHEL PLACIDI, GIOCONDO LORENZON, and ROGER RAHMANNI 308

Effect of Iron Overload on the Metabolism and Urinary Recovery of 3-Hydroxyxipyrindin-4-one Chelating Agents in the Rat. RUKSANA CHODHURY and SURINDER SINGH 314

Human Liver Cytochrome P4503A Biotransformation of the Cyclosporin Derivative SDZ IMM 125. ALISON E. M. VICKERS, ERIN MEYER, ROBERT DANNECKER, BLANDINE KELLER, ROYAL E. TYNES, and GERARD MAURER 321

Comparative Disposition of Morphine-3-glucuronide during Separate Intravenous Infusions of Morphine and Morphine-3-glucuronide in Sheep: Importance of the Kidney. ROBERT W. MILNE, COLIN F. McLEAN, LAURENCE E. MATHER, ROGER L. NATION, WILLIAM B. RUNCIMAN, ALBERT J. RUTTEN, and ANDREW A. SOMOGYI 334

Characterization of the in Vitro Glucuronidation of Flurbiprofen Enantiomers. MOHAMED HAMDOUNE, JACQUES MOUNIE, JACQUES MAGDALOU, TAOUIFK MASMOUDI, HERVE GoudONNET, and ANDRE ESFOUSSE 343

In Vivo Disposition of Caffeine Predicted from Hepatic Microsomal and Hepatocyte Data. KAREN A. HAYES, BEVERLEY BRENNAN, RICHARD CHENERY, and J. BRIAN HOUSTON 349

Reduction of the Prodrug Loperamide Oxide to Its Active Drug Loperamide in the Gut of Rats, Dogs, and Humans. KAREL LAVRUNSEN, DIRK VAN DYCK, JOS VAN HOUDT, JAN HENDRICKX, JOHAN MONBALIU, ROBERT WOESTENBORGHs, WILLEM MEULDERMANS, and JOS HEYKANTS 354

Metabolism and Elimination of 5,6-Dimethylxanthenone-4-acetic Acid in the Isolated Perfused Rat Liver. LORRAINE K. WEBSTER, ANDREW G. ELLIS, PHILIP KESTELL, and GORDON W. NEWCASTLE 363


Continued on next page
Contents (cont’d.)

In Vitro Metabolism of Tirilazad Mesylate in Male and Female Rats: Contribution of Cytochrome P4502C11 and Δ⁴-5α-Reductase. LARRY C. WIENKERS, RICK C. STEENWYK, STEVEN A. MIZSAK, AND PAUL G. PEARSON ........................................... 383

Kinetics of Drug Metabolism in Rat Liver Slices: Rates of Oxidation of Ethoxycoumarin and Tolbutamide, Examples of High- and Low-Clearance Compounds. PHILIP D. WORBOYS, ALAN BRADBURY, AND J. BRIAN HOUSTON ........................................... 393

Thiopurine Methyltransferase Pharmacogenetics: Cloning of Human Liver cDNA and a Processed Pseudogene on Human Chromosome 18q21.1. DANIEL LEE, CAROL SZULMANSKI, JON HOUGHTON, RONALD HONCHEL, KATHERINE ROJAS, JOAN OVERHAUSER, ERIC D. WIEBEN, AND RICHARD M. WEINSHILBOUM ........................................... 398

N₂-Hydroxylation of Sulfamethoxazole by Cytochrome P450 of the Cytochrome P4502C Subfamily and Reduction of Sulfamethoxazole Hydroxylamine in Human and Rat Hepatic Microsomes. ALASTAIR E. CRIBB, STEPHEN P. SPIELBERG, AND GEARÓID P. GRIFFIN ........................................... 406

Comparative Analysis of Cytochrome P4503A Induction in Primary Cultures of Rat, Rabbit, and Human Hepatocytes. THOMAS A. KOCAK, ERIN G. SCHUETZ, STEPHEN C. STROM, ROBERT A. FISHER, AND PHILIP S. GUZELIAN ........................................... 415


SHORT COMMUNICATIONS

Induction of Catechol-O-methyltransferase in the Luminal Epithelium of Rat Uterus by Progesterone: Inhibition by RU-486. KATSUHIRO INOUE AND CYRUS R. CREVELING ........................................... 430


Selectivity of Cytochrome P4502E1 in Chlorzoxazone 6-Hydroxylation. HIROSHI YAMAZAKI, ZUYO GUO, AND F. PETER GUENGERICH ........................................... 438

Erratum


The units for 1’-hydroxy midazolam formation rates listed throughout the text and figures should be pM/min and not pg/min as given.

ANNOUNCEMENT

The 14th International Symposium of the Society of Toxicologic Pathologists will be held from June 11 to 15, 1995

at the San Diego Marriott Hotel and Marina, San Diego, California

For information, contact Mary M. O’Connor, Society of Toxicologic Pathologists,